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ABSTRACT

The potential impact of several maternal involvement behaviors on teachers' ratings of children's academic skills was examined through statistical analyses. Data, based on mothers' responses to selected questions concerning maternal involvement and on teachers' ratings on the Classroom Behavior Inventory, were obtained for 115 kindergarten children. Subjects' sex and the educational level of subjects' mothers were used as control variables. Although results did not support previous findings of a relationship between high maternal involvement and superior academic performance, one significant relationship was found: maternal help with sight words was associated with children's reading difficulty. (RH)

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Maternal Involvement[1] and Academic Achievement

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Abstract

This study examined the relationship between maternal involvement and teachers' ratings of academic skills. Accordingly, data concerning 115 kindergarteners were analyzed. One significant relationship was found. Maternal help with sight words was associated with reading difficulty. Although replication is needed, these findings suggest maternal involvement occurring in an everyday setting is not related to children's academic achievement.

Few researchers have examined the relationship between ordinary varieties of maternal involvement and children's academic achievement. Anchor and Anchor (1974) are among the few investigators who focused on this issue. They found parents of successful students attended parent-teacher conferences in significantly higher numbers than parents of poorer students.

Most investigators who have linked maternal involvement with superior academic performance have limited themselves to examining the potential influence of parental participation in homebased reinforcement and other types of intervention programs on children's school achievement. Trovato and Bucher (1980), for example, found mother administered reinforcement effective in enhancing reading test scores. Karraker (1972) found a similar behavior modification program associated with improved arithmetic performance. Different types of compensatory programs which involve mothers in an instructional role have been successful. Radin (1972) compared the effect of three degrees of maternal involvement in a preschool program on children's vocabulary development. Children assigned to the two maternal involvement groups experienced significantly greater gains in Peabody Picture Vocabulary Test IQ than subjects placed in the minimal maternal involvement treatment. Similarly, preschool children enrolled in Levenstein's (1971) structured curriculum designed to increase verbal interaction between lower-class mothers and their children experienced appreciately improved IQ scores and adequate performance in basic first grade subjects.

Researchers in this area have focused extensively on the potential influence of one formal intervention strategy at a time within an experimental context. In contrast, this study simultaneously compares the potential impact of several different maternal involvement behaviors occurring in an everyday setting on teachers' perceptions of academic performance. To achieve this end, statistical analyses were conducted using data from the Family School Socialization Project (Fleming & Sussman, Note 1), a panel study of family and school behaviors elicited by children enrolled in Northeastern Ohio elementary schools and kindergartens.

Subjects

The focus of this study is limited to data derived from interviews with mothers and teachers of 115 entering kindergarteners (54 males and 61 females). All children were residents of a predominantly white, affluent suburb of Cleveland, Ohio.

Variables

A number of inquiries from the mothers' questionnaires were used in the assessment of parental involvement. Included among these were the following:

1. Have you helped ___ with a. (Hlprd 1) phonics
   b. (Hlprd 2) sight words
2. During your first interview we asked what your intentions were. Now please tell me whether or not you have been able to participate in any of the following. You may just answer yes or no.

a. (Inten 1) Visit your child's class during parents day.

b. (Inten 2) Attend PTA.

c. (Inten 3) Become a volunteer school worker--help out.

d. (Inten 4) Support any drives, clubs, parties, etc. at school.

e. (Inten 5) Become a room mother--work in the classroom.

f. (Inten 6) Listen to or watch a TV/Radio "special" program concerned with education.

g. (Inten 7) Visit your child's class during the regular school day.

h. (Inten 8) Go to community meetings concerned with school programs.

i. (Inten 9) Watch educational TV programs such as Sesame Street and Electric Company.

The Classroom Behavior Inventory (CBI), designed by Schaefer and Aaronson (1976), was chosen as a measure of classroom performance. Teacher respondents to this questionnaire grade each student on language skills, number concept, reading (or readiness) and health and personal care. Available grade options are: A = excellent; B = good; C = fair; D = poor and F = unacceptable. While these are not standardized measures of academic achievement, they do reflect the teachers' perception of the child's achievement. It is anticipated that, similar to formal intervention

strategies, parental involvement in informal strategies will be positively related to the teacher's perception of the child's academic performance as reflected in the CBI.

In addition to selected measures of maternal involvement and the indexes of teachers' perceptions of academic success, the Family-School Socialization Project data bank also contained information on the subject's sex and the education level of subjects' mothers. These dimensions were used as control variables.

Procedure

The data were analyzed in stages. Pearson Product Moment Correlations were used to develop composite measures for the parental involvement items. Pearson Product Moment correlations were then computed between the composite maternal involvement variables and CBI grades. This analysis was repeated separately for the male and female children. To check the possibility that mothers' education level may have influenced the correlations for which predictions have been made, a second series of correlations were computed--this time with mothers' education level partialled out.

Results

When Pearson Product-Moment Correlations were computed between Int 1-9, Int 1, 2, 3, 4, 5, 7 and 8 were found to be highly intercorrelated. These items were summed in subsequent analyses and had an alpha reliability greater than .80. The resulting composite, referred to as Intcomp, measured the mother's participation in school events or activities. Since Int 6 and Int 9 were highly

intercorrelated, Int 6 was dropped from later analyses. Int 9 determined whether or not mothers viewed educational television programs. Pearson Product Moment Correlations were then performed between Intcomp and all remaining Int variables. As anticipated, Intcomp correlated highly with Int 1, 2, 3, 4, 5, 7, and 8 but was not significantly correlated with Int 9. Participation in school activities was independent of watching educational television. Since Hlprd 1, helping with phonics, was highly correlated with Hlprd 2, helping with sight word, a decision was made to drop Hlprd 1 from subsequent analyses.

At the completion of the first stage of data analysis, Hlprd 2, Int 9 and Intcomp were selected as independent variables. Pearson Product Moment Correlations were computed between these variables and CBI grades.

Hlprd 2 was the only maternal involvement variable which correlated with any CBI grade. The correlation of -.259 between Hlprd 2 and teachers perception of reading ability was significant at the .01 level. Helping with sight words was negatively associated with reading ability of the children. Very little difference was found between zero order correlations and partial correlation coefficients which controlled for mother's education.

Different findings emerged when separate correlations were completed for the male and female components of the sample. Unlike the correlations computed for the sample as a whole, maternal involvement did not correlate significantly with any of the CBI

grades when separate correlations were computed for the male subsample. However, sight reading help correlated -.31 ($p < .05$) with number grade and -.26 ($p < .05$) with reading grade for the female subsample.

The difference that emerged between the correlations of the male and female subsamples indicate the sex of the child influences the relationship between the mothers' involvement and the teachers' perception. Mothers' involvement was not related to teachers' perception of the academic achievement of boys. It was negatively associated with the teachers' perceptions of the girls. Future researchers might shed more light on this area by performing separate analyses for the male and female children in addition to the analyses performed for the sample as a whole.

Discussion

The hypothesis regarding parent involvement was not confirmed. The data from this study do not support previous findings of a relationship between maternal involvement and superior academic performance.

There are a variety of possible reasons why the findings of the present study are inconsistent with the majority of reported findings. Past research in this area has been largely experimental. Typically subjects are trained in some area and assessment is specifically geared to measure behavior change resulting from instruction. The independent and dependent measures of the present

investigation are not experimental treatments and occur in natural settings. They represent informal behavior and perception, rather than structured intervention using a specific technique.

The lack of relationship found in the present study may also be due to measurement problems. More specifically, we may not have adequate ways of assessing a more general type of maternal involvement occurring in an everyday context. Further research is needed in this area.

It is interesting that the variables which were related conceptionally were significantly correlated in a negative direction. It is possible that mothers may spend more time helping those children with sight words who are having difficulty with reading.

In addition to this, the level of maternal involvement may have influenced teachers' ratings of academic skills. Future investigators should control for this possibility.

The results of the present study suggest that maternal involvement occurring in an everyday context is not related to teachers' perceptions of academic performance regardless of mothers' education level. These findings imply that encouragement of maternal involvement in informal activities by school personnel will not be associated with enhanced student achievement. Other studies cited imply, however, that parental involvement in informal intervention strategies may be useful. Since studies of informal involvement do not appear in the literature, further exploration of this issue with a variety of maternal involvement measures is needed.

Reference Notes

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Footnotes

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